

Amendments to the Claims:

Claims 1-15. (Cancelled)

Claim 16. (Currently amended) A method for identifying a candidate compound as a compound that may be useful for the treatment of Alzheimer's disease, said method comprising the steps of:

- (a) providing a cell *in vitro* expressing a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;
- (b) contacting said cell with a candidate compound; and
- (c) measuring said activity, wherein a decrease in said activity, relative to the activity of the endocytic pathway in a cell expressing the recombinant nucleic acid but not contacted with the candidate compound, identifies the candidate compound as a compound that may be useful for the treatment of Alzheimer's disease.

Claim 17. (Previously presented) The method of claim 16, wherein said activity of the endocytic pathway is selected from the group consisting of endosomal fusion, endosomal recycling, expression of MPR46, accumulation of lysosomal hydrolases in early endosomes, and accumulation of A β in early endosomes.

Claim 18. (Cancelled)

Claim 19. (Original) The method of claim 16, wherein said cell is from a cell line selected from the group consisting of a fibroblast cell line, a neuronal cell line, and a neuroblastoma cell line.

Claim 20. (Original) The method of claim 16, wherein said cell is selected from the group consisting of a fibroblast, a neuron, and an endothelial cell.

Claim 21. (Cancelled)

Claim 22. (Currently Amended) A method for identifying a candidate compound as a compound that may be useful for the treatment of Alzheimer's disease, said method comprising the steps of:

- (a) providing a cell *in vitro* expressing a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;
- (b) contacting said cell with a candidate compound; and
- (c) measuring A β formation, wherein a decrease in A β formation, relative to A β formation by a cell expressing the recombinant nucleic acid but not contacted with the candidate compound, identifies the candidate compound as a compound that may be useful for the treatment of Alzheimer's disease.

Claim 23. (Cancelled)

Claim 24. (Original) The method of claim 22, wherein said cell is from a cell line selected from the group consisting of a fibroblast cell line, a neuronal cell line, and a neuroblastoma cell line.

Claim 25. (Original) The method of claim 22, wherein said cell is selected from the group consisting of a fibroblast, a neuron, and an endothelial cell.

Claim 26. (Original) The method of claim 22, wherein said cell is *in vitro*.

Claim 27. (Currently Amended) A method for identifying a candidate compound as a compound that may be useful for the treatment of Alzheimer's disease, said method comprising the steps of:

- (a) providing a mouse stably expressing a transgene comprising a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;
- (b) administering a candidate compound to said mouse; and
- (c) measuring said activity, wherein a decrease in said activity, relative to activity in a mouse expressing said transgene but not contacted with said candidate compound, identifies the candidate compound as a compound that may be useful for the treatment of Alzheimer's disease.

Claim 28. (Original) The method of claim 27, wherein said activity of the endosomal pathway is selected from the group consisting of endosomal fusion, endosomal recycling, expression of MPR46, accumulation of lysosomal hydrolases in early endosomes, and accumulation of A β in early endosomes.

Claim 29. (Cancelled)

Claim 30. (Currently amended) A method for identifying a candidate compound as a compound that may be useful for the treatment of Alzheimer's disease, said method comprising the steps of:

- (a) providing a mouse stably expressing a transgene comprising a recombinant rab5 nucleic acid that increases activity of the endocytic pathway;
- (b) administering a candidate compound to said mouse; and
- (c) measuring A β formation, wherein a decrease in said A β formation, relative to A β formation in a mouse expressing said transgene but not contacted with said candidate compound, identifies the candidate compound as a compound that may be useful for the treatment of Alzheimer's disease.

Claim 31-35. (Cancelled)